

dB (W/4kHz) for all methods of modulation and accessing techniques.

(3) The maximum transmitter power spectral density of an analog carrier into any GSO FSS earth station antenna shall not exceed -8.0 dB(W/4kHz) and the maximum GSO FSS satellite EIRP spectral density shall not exceed $+17.0$ dB(W/4kHz).

(4) Any earth station applicant filing an application to operate a VSAT network after December 24, 2008 in the Ku-band and planning to use a contention protocol must certify that its contention protocol usage will be reasonable.

(h) VSAT operators licensed pursuant to this section are prohibited from using remote earth stations in their networks that are not designed to stop transmission when synchronization with the signal received from the target satellite fails.

[56 FR 66001, Dec. 20, 1991, as amended at 62 FR 5929, Feb. 10, 1997; 66 FR 31560, June 12, 2001; 70 FR 32254, June 2, 2005; 70 FR 33376, June 8, 2005; 73 FR 70900, Nov. 24, 2008; 78 FR 8421, Feb. 6, 2013]

EFFECTIVE DATE NOTE: At 74 FR 9962, Mar. 9, 2009, §25.134 paragraph (g)(4), which contains information collection and record-keeping requirements, became effective with approval by the Office of Management and Budget for a period of three years.

§ 25.135 Licensing provisions for earth station networks in the non-voice, non-geostationary mobile-satellite service.

(a) Each applicant for a blanket earth station license in the non-voice, non-geostationary mobile-satellite service shall demonstrate that transceiver operations will not cause unacceptable interference to other authorized users of the spectrum, based on existing system information publicly available at the Commission at the time of filing, and will comply with operational conditions placed upon the systems with which they are to operate in accordance with §25.142(b). This demonstration shall include a showing as to all the technical parameters, including duty cycle and power limits, under which the individual user transceivers will operate.

(b) Transceiver units associated with the non-voice, non-geostationary mobile-satellite service may not be operated on civil aircraft. All portable or

hand-held transceiver units (including transceiver units installed in other devices that are themselves portable or hand-held) having a receiver operating in the 137–138 MHz band shall bear the following statement in a conspicuous location on the device: “This device may not be operated while on board a civil aircraft. It must be turned off at all times while on board such an aircraft.” This subsection shall not apply to transceiver units whose receivers are incapable of radiating in the 108–137 MHz frequency bands.

(c) Transceiver units in this service are authorized to communicate with and through U.S. authorized space stations only. No person without an FCC license for such operation may transmit to a space station in this service from anywhere in the United States except to receive service from the holder of a pertinent FCC blanket license or from another party with the permission of such a blanket licensee.

(d) The holder of an FCC blanket license for operation of transceivers for communication via a non-voice, non-geostationary mobile-satellite system shall be responsible for operation of any such transceiver to receive service provided by the blanket licensee or provided by another party with the blanket licensee’s consent. Operators of non-voice, non-geostationary mobile-satellite systems shall not transmit communications to or from user transceivers in the United States unless such communications are authorized under a service contract with the holder of a pertinent FCC blanket license or under a service contract another party with authority for such transceiver operation delegated by such a blanket licensee.

[58 FR 68059, Dec. 23, 1993, as amended at 69 FR 5710, Feb. 6, 2004]

§ 25.136 Licensing provisions for user transceivers in the 1.6/2.4 GHz, 1.5/1.6 GHz, and 2 GHz Mobile-Satellite Services.

In addition to the technical requirements specified in §25.213, earth stations operating in the 1.6/2.4 GHz and 1.5/1.6 GHz Mobile-Satellite Services are subject to the following operating conditions:

(a) User transceiver units associated with the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service may not be operated on civil aircraft unless the earth station has a direct physical connection to the aircraft cabin or cockpit communication system.

(b) No person without an FCC license for such operation may transmit to a space station in this service from anywhere in the United States except to receive service from the holder of a pertinent FCC blanket license or from another party with the permission of such a blanket licensee.

(c) The holder of an FCC blanket license for operation of transceivers for communication via a 1.6/2.4 GHz, 1.5/1.6 GHz, or 2 GHz Mobile-Satellite Service system shall be responsible for operation of any such transceiver to receive service provided by that licensee or provided by another party with the blanket licensee's consent. Operators of such satellite systems shall not transmit communications to or from user transceivers in the United States unless such communications are authorized under a service contract with the holder of a pertinent FCC blanket license for transceiver operation or under a service contract with another party with authority for such transmission delegated by such a blanket licensee.

(d) Any mobile earth station (MES) associated with the Mobile-Satellite Service operating in the 1530–1544 MHz and 1626.5–1645.5 MHz bands shall have the following minimum set of capabilities to ensure compliance with Footnote 5.353A in 47 CFR 2.106 and the priority and real-time preemption requirements imposed by Footnote US315 in that rule section.

(1) All MES transmissions shall have a priority assigned to them that preserves the priority and preemptive access given to maritime distress and safety communications sharing the band.

(2) Each MES with a requirement to handle maritime distress and safety data communications shall be capable of either:

(i) Recognizing message and call priority identification when transmitted

from its associated Land Earth Station (LES) or

(ii) Accepting message and call priority identification embedded in the message or call when transmitted from its associated LES and passing the identification to shipboard data message processing equipment.

(3) Each MES shall be assigned a unique terminal identification number that will be transmitted upon any attempt to gain access to a system.

(4) After an MES has gained access to a system, the mobile terminal shall be under control of a LES and shall obtain all channel assignments from it.

(5) All MESs that do not continuously monitor a separate signalling channel or signalling within the communications channel shall monitor the signalling channel at the end of each transmission.

(6) Each MES shall automatically inhibit its transmissions if it is not correctly receiving separate signalling channel or signalling within the communications channel from its associated LES.

(7) Each MES shall automatically inhibit its transmissions on any or all channels upon receiving a channel-shut-off command on a signalling or communications channel it is receiving from its associated LES.

(8) Each MES with a requirement to handle maritime distress and safety communications shall have the capability within the station to automatically preempt lower precedence traffic.

(e) Any Land Earth Station (LES) associated with the Mobile-Satellite Service operating in the 1530–1544 MHz and 1626.5–1645.5 MHz bands must have the following minimum set of capabilities to ensure that the MSS system complies with Footnote 5.353A and the priority and real-time preemption requirements imposed by Footnote US315. It should be noted that the LES operates in the Fixed-Satellite Service ("FSS") as a feeder-link for the MSS (Radio Regulations 71) and that the following capabilities are to facilitate the priority and preemption requirements. The FSS feeder-link stations fulfilling these MSS requirements shall not have any additional priority with respect to FSS stations operating with other FSS systems.

(1) All LES transmissions to mobile earth stations (MESs) shall have a priority assigned to them that preserves the priority and preemptive access given to maritime distress and safety communications.

(2) The LES shall recognize the priority of calls to and from MES and make channel assignments taking into account the priority access that is given to maritime distress and safety communications.

(3) The LES shall be capable of receiving the MES identification number when transmitted and verifying that it is an authorized user of the system to prohibit unauthorized access.

(4) The LES shall be capable of transmitting channel assignment commands to the MESs.

(5) The communications channels used between the LES and the MES shall have provision for signalling within the voice/data channel, for an MES, which does not continuously monitor the LES signalling channel during the time of a call.

(6) The LES shall transmit periodic control signalling signals to MES, which do not continuously monitor the LES signalling channel.

(7) The LES shall automatically inhibit all transmissions to MESs to which it is not transmitting a signalling channel or signalling within the communications channel.

(8) The LES shall be capable of transmitting channel-shut-off commands to the MESs on signalling or communications channels.

(9) Each LES shall be capable of interrupting, and if necessary, preempting ongoing routine traffic from an MES in order to complete a maritime distress, urgency or safety call to that particular MES.

(10) Each LES shall be capable of automatically turning off one or more of its associated channels in order to complete a maritime distress, urgency or safety call.

(f) *Incorporation of ancillary terrestrial component base station into an L-band mobile-satellite service system.* Any licensee authorized to construct and launch an L-band mobile-satellite system may construct ancillary terrestrial component (ATC) base stations as defined in § 25.201 at its own risk and

subject to the conditions specified in this subpart any time after commencing construction of the mobile-satellite service system.

(g) *Pre-operational build-out and testing.* An MSS licensee may, without further authority from the Commission and at its own risk engage in pre-operational build-out and, conduct equipment tests for the purpose of making such adjustments and measurements as may be necessary to assure compliance with the terms of the technical provisions of its MSS license, ATC operation requirements, the rules and regulations in this Part and the applicable engineering standards. Prior to engaging in such pre-operational build-out and testing, an MSS licensee must notify the Commission concerning the initiation of MSS system satellite construction and the MSS operator's intent to construct and test ATC facilities. This notification must take the form of a letter formally filed with the Commission in the appropriate MSS license docket. Such letter shall specify the frequencies on which the MSS licensee proposes to engage in pre-operational testing and shall specify the name, address, telephone number and other such information as may be necessary to contact a MSS licensee representative for the reporting and mitigation of any interference that may occur as a result of such pre-operational testing and build-out. MSS licensees engaging in pre-operational build-out and testing must also comply with §§ 5.83, 5.85(c), 5.111, and 5.117 of this chapter relating to experimental operations. An MSS licensee may not offer ATC service to the public for compensation during pre-operational testing. In order to operate any ATC base stations, such a licensee must meet all the requirements set forth in § 25.147 and must have been granted ATC authority.

(h) *Aircraft.* All portable or hand-held transceiver units (including transceiver units installed in other devices that are themselves portable or hand-held) having operating capabilities in the 1626.5–1660.5 MHz and 1525–1559 MHz bands shall bear the following statement in a conspicuous location on the device: “This device may not be operated while on board aircraft. It must be

turned off at all times while on board aircraft.”

[65 FR 59142, Oct. 4, 2000, as amended at 67 FR 46604, July 16, 2002; 67 FR 51110, Aug. 7, 2002; 68 FR 43645, July 24, 2003; 68 FR 47858, Aug. 12, 2003; 69 FR 5710, Feb. 6, 2004; 78 FR 8421, Feb. 6, 2013]

§ 25.137 Application requirements for earth stations operating with non-U.S. licensed space stations.

(a) Earth station applicants or entities filing a “letter of intent” or “Petition for Declaratory Ruling” requesting authority to operate with a non-U.S. licensed space station to serve the United States must attach an exhibit with their FCC Form 312 application with information demonstrating that U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services in:

(1) The country in which the non-U.S. licensed space station is licensed; and

(2) All countries in which communications with the U.S. earth station will originate or terminate. The applicant bears the burden of showing that there are no practical or legal constraints that limit or prevent access of the U.S. satellite system in the relevant foreign markets. The exhibit required by this paragraph must also include a statement of why grant of the application is in the public interest. This paragraph shall not apply with respect to requests for authority to operate using a non-U.S. licensed satellite that is licensed by or seeking a license from a country that is a member of the World Trade Organization for services covered under the World Trade Organization Basic Telecommunications Agreement.

(b) Any request pursuant to paragraph (a) of this section must be filed electronically through the International Bureau Filing System and must include an exhibit providing legal and technical information for the non-U.S.-licensed space station of the kind that § 25.114 would require in a license application for that space-station, including but not limited to, information required to complete Schedule S. An applicant may satisfy this requirement by cross-referencing a pending application containing the requisite information or by citing a prior grant of au-

thority to communicate via the space station in question in the same frequency bands to provide the same type of service.

(c) A non-U.S.-licensed NGSO-like satellite system seeking to serve the United States can be considered contemporaneously with other U.S. NGSO-like satellite systems pursuant to § 25.157 and considered before later-filed applications of other U.S. satellite system operators, and a non-U.S.-licensed GSO-like satellite system seeking to serve the United States can have its request placed in a queue pursuant to § 25.158 and considered before later-filed applications of other U.S. satellite system operators, if the non-U.S.-licensed satellite system:

(1) Is in orbit and operating;

(2) Has a license from another administration; or

(3) Has been submitted for coordination to the International Telecommunication Union.

(d) Earth station applicants requesting authority to operate with a non-U.S.-licensed space station and non-U.S.-licensed satellite operators filing letters of intent or petitions for declaratory ruling to access the U.S. market must demonstrate that the non-U.S.-licensed space station has complied with all applicable Commission requirements for non-U.S. licensed systems to operate in the United States, including but not limited to the following:

(1) Milestones;

(2) Reporting requirements;

(3) Any other applicable service rules;

(4) For non-U.S.-licensed satellites that are not in orbit and operating, a bond must be posted. This bond must be in the amount of \$5 million for NGSO satellite systems, or \$3 million for GSO satellites, denominated in U.S. dollars, and compliant with the terms of § 25.165 of this chapter. The party posting the bond will be permitted to reduce the amount of the bond upon a showing that a milestone has been met, in accordance with the terms of § 25.165(d) of this chapter.

(5) Non-U.S. licensed GSO-like space station operators with a total of five requests for access to the U.S. market in a particular frequency band, or a total of five previously granted requests for access to the U.S. market